F A C T S H E E T

Federal Emergency Management Agency

NUCLEAR POWER PLANT EMERGENCY

Although construction and operation of nuclear power plants are closely monitored and regulated by the Nuclear Regulatory Commission, accidents, though unlikely, are possible. The most immediate danger from an accident at a nuclear power plant is exposure to high levels of radiation.

Know these facts about a nuclear power plant emergency.

■ A nuclear power plant accident would not cause the same widespread destruction as a nuclear weapon.

■ Although radioactive materials could be released in a cloud or *plume*, no fallout is produced to endanger people.

■ There may be a radiation hazard in the surrounding areas, depending on the type of accident, amount of radition released, and weather factors.

■ Radiation would be monitored by authorities to determine potential danger and warn the public.

■ Local citizens would be evacuated or instructed on how to avoid radiation hazards.

Attend public information meetings.

Local emergency managers and plant officials can provide information about radioactivity; safety precautions; and local, state, industry, and federal accident emergency plans.

Ask about the hazards radiation may pose to your family. Young children, pregnant women, and the elderly may be affected more than others.

Ask where nuclear power plants, radioactive storage sites, and radioactive waste dumps are located.

Learn your community's warning systems.

Learn emergency plans for schools, day care centers, nursing homes — anywhere family members might be.

Have disaster supplies on hand.

- Flashlight and extra batteries
- Portable, battery-operated radio and extra batteries
- First aid kit and manual
- Emergency food and water
- Nonelectric can opener
- Essential medicines
- Cash and credit cards
- Sturdy shoes

Obtain information about official evacuation routes from local officials.

Terms for Describing Nuclear Power Plant Emergencies

Know the following terms and what they mean:

Notification of unusual event means a problem has occurred at the plant, but no radiation leak is expected. No action by you is necessary.

Alert means that small amounts of radiation could leak inside the plant, but it will not affect the community. No action by you is necessary.

Site area emergency describes a more serious problem. Small amounts of radiation could leak from the plant. Area sirens may sound. Listen to your radio or television for information.

General emergency refers to a serious problem. Radiation could leak outside the plant and off the plant site. Area sirens will sound. Listen to your radio or television for instructions. Be prepared to evacuate or find shelter in your home.

Be prepared to evacuate or find shelter in your home.

Develop an emergency communication plan.

In case family members are separated from one another during a disaster (a real possibility during the day when adults are at work and children are at school), have a plan for getting back together.

Ask an out-of-state relative or friend to serve as the "family contact." After a disaster, it's often easier to call long distance. Make sure everyone knows the name, address, and phone number of the contact person.

Emergency Response Plans

Federal, state, and local officials work together to develop emergency response plans for nuclear power plants and surrounding communities. These plans are tested through emergency exercises that can include small-scale evacuation drills for public institutions such as schools and nursing homes.

Listen to a battery-operated radio or television for official information. *Not all nuclear power plant incidents result in the release of radiation.*

If advised to remain at home:

- Bring pets inside.
- Close and lock windows and doors.
- Turn off air conditioning, vents, fans, and furnace.
- Close fireplace dampers.
- Go to the basement or other underground area.
- Stay inside until authorities say it is safe.
- If you must go out, cover mouth and nose.

When coming in from outdoors:

- Shower and change clothing and shoes.
- Put items worn outdoors in a plastic bag and seal it.

If advised to evacuate:

- Listen to a radio or television for information on evacuation routes, temporary shelters, and procedures.
- Minimize contamination in house.
- Close and lock windows and doors.
- Turn off air conditioning, vents, fans and furnace.
- Close fireplace dampers.
- Take disaster supplies.

Remember your neighbors who may require special assistance — infants, elderly people, and people with disabilities.

Three Ways to Minimize Radiation Exposure

There are three ways to minimize radiation exposure to your body:

Distance — The more distance between you and the source of the radiation, the less radiation you will receive. In a serious nuclear accident, local officials will likely call for an evacuation, thereby increasing the distance between you and the radiation.

Shielding — Like distance, the more heavy, dense materials between you and the source of the radiation, the better. This is why local officials could advise you to remain indoors if a radiological accident occurs. In some cases, the walls in your home would be sufficient shielding to protect you.

Time — Most radioactivity loses its strength fairly quickly. Limiting the time spent near the source of radiation reduces the amount of radiation you will receive. Following a radiological accident, local authorities will monitor any release of radiation and determine when the threat has passed.

After the Event

When the immediate danger has passed, avoid using foods from your garden or milk from cows or goats until they can be inspected by local emergency officials. Remember that contamination can affect areas many miles from the accident site.

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EMERGENCY PUBLIC INFORMATION

September 1993